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EXAMINER
THIER, MICHAEL

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 March 2010</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>51-98</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>51-57,60-67,70-77,80-84,86-90,92-96 and 98</u> is/are rejected.

7)☒ Claim(s) <u>58,59,68,69,78,79,85,91 and 97</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 July 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

3/4/2010 has been entered.

Response to Arguments

2.   Applicant's arguments have been considered but are moot in view of the new

ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 51, 61, 71, 81, 87, and 93 are rejected under 35 U.S.C. 103(a) as being

unpatentable over "Over-the-Air Service Provisioning of Mobile Stations in Spread

Spectrum System", 3rd Generation Partnership Project 2, 3GPP2, Document C.S0016-

0, December 1999, pages 1-118 (hereinafter 3GPP2) in view of Cook et al. (US

6577614).

Regarding claims 51, 61, and 71. 3GPP2 teaches a method, apparatus and

memory (title and preface) comprising:

sending a notification from a server to a mobile station, wherein the notification is

configured to begin updating of a security-related parameter by the mobile station (page

4-6, Table 4.5-1, Configuration request message sent from the server to the mobile);

receiving, by the server, a capability message from the mobile station, wherein

the capability message is indicative of a messaging technique supported by the mobile

station (page 3-20, Table 3.5-1, Protocol Capability Response Message sent from the

mobile thus received by the server);

sending, based on the capability message, a first request message from the

server to the mobile station, wherein the first request message comprises at least one

first command defined to cause the mobile station to invoke a process to update the

security-related parameter (page 4-6, Table 4.5-1, MS Key Request Message sent from

the server to the mobile);

receiving, by the server, a first response message from the mobile station,

wherein the first response message comprises a status of a computation of a first value

performed by the mobile station (page 3-20, Table 3.5-1, MS Key Response Message

sent from the mobile to the server);

sending a second request message from the server to the mobile station,

wherein the second request message comprises a second value and at least one

second command defined to cause the mobile station to compute the security-related

parameter (page 4-6, Table 4.5-1, Key Generation Request Message sent from the

server to the mobile);

receiving, by the server, a second response message from the mobile station,

wherein the second response message comprises the first value (page 3-20, Table 3.5-

1, Key Generation Response Message sent from the mobile to the server);

sending a first commit message from the server to the mobile station (page 4-6,

Table 4.5-1, Commit Request Message sent from the server to the mobile); and

receiving, by the server, a first commit response message from the mobile station

(page 3-20, Table 3.5-1, Commit Response message sent from the mobile to the

server).

However 3GPP2 does not specifically recite wherein communications between

the server and the mobile station are performed using an internet protocol.

Cook teaches a method and system for OTA over CDMA data channel (title). He

teaches the idea of receiving update parameters from a server and providing them to

the mobile station (abstract). Cook teaches the idea that communications between the

server and the mobile station is performed using an internet protocol in column 2 lines

36-46 and column 6 lines 44-46, i.e. IS-707.

Therefore it would have been obvious for one of ordinary skill in the art at the

time of invention to utilize the teachings as in Cook with the teachings as in 3GPP2. The

motivation for doing so would have been to allow for over the air updates utilizing a data

channel in accordance with a CDMA interface. (cook column 3 lines 15-28)

Regarding claims 52, 62, and 72. 3GPP2 further teaches wherein the security-

related parameter comprises an authentication key, a security key or a security key

defined by a code-division multiple access standard. (page 4-4, A-Key, i.e.

authentication key)

Regarding claims 53, 63, and 73. Cook further teaches wherein the internet

protocol comprises an internet protocol based over-the-air device management

protocol. (column 5 lines 47-64)

Regarding claims 54, 64, and 74. Cook further teaches wherein the server

comprises an internet protocol based over- the-air device management server. (figure 1

item 12)

Regarding claims 55, 65, and 75. 3GPP2 further teaches wherein the first value

comprises a MS_RESULT value and wherein the second value comprises a

BS_RESULT value. (page 3-24 and 4-9)

Regarding claims 56, 66, and 76. 3GPP2 further teaches wherein the at least

one first command comprises a first EXEC command and wherein the at least one

second command comprises a second EXEC command. (pages 4-8 and 4-9)

Regarding claims 57, 67 and 77. 3GPP2 and Cook further teach wherein the

first request message comprises an internet protocol-based over-the-air device

management key request message, wherein the first response message comprises an

internet protocol-based over-the-air device management key response message,

wherein the second request message comprises an internet protocol-based over-the-air

device management key gen request message, wherein the second response message

comprises an internet protocol-based over-the air device management key gen

response message, wherein the commit message comprises an internet protocol-based over-the-air device management commit message, wherein the commit response message comprises an internet protocol-based over-the-air device management commit response message. (3 GPP2 shows the specific types of message in tables 3.5-1 and 4.5-1, and Cook teaches the communications can be internet protocol-based over the air in column 5 lines 47-64)

Regarding claims 60, 70 and 80. 3GPP2 further teaches in response to the server receiving the first response message from the mobile station, computing, by the server, the second value (page 4-9); and in response to the server receiving the second response message from the mobile station, computing, by the server, the security-related parameter (page 4-9 and 4-10).

Regarding claims 81, 87, and 93. 3GPP2 teaches a method, apparatus, and memory (title and preface) comprising:

sending a notification from a server to a mobile station, wherein the notification is configured to begin updating of a security-related parameter by the mobile station (page 4-6, Table 4.5-1, Configuration request message sent from the server to the mobile);

sending a first request message from the server to the mobile station, wherein the first request message comprises at least one first command defined to cause the mobile station to invoke a process to update the security-related parameter (page 4-6, Table 4.5-1, MS Key Request Message sent from the server to the mobile);

sending a second request message from the server to the mobile station, wherein the second request message comprises a second value and at least one

second command defined to cause the mobile station to compute the security-related

parameter (page 4-6, Table 4.5-1, Key Generation Request Message sent from the

server to the mobile); and

sending a first commit message from the server to the mobile station (page 4-6,

Table 4.5-1, Commit Request Message sent from the server to the mobile).

However 3GPP2 does not specifically recite wherein communications between

the server and the mobile station are performed using an internet protocol.

Cook teaches a method and system for OTA over CDMA data channel (title). He

teaches the idea of receiving update parameters from a server and providing them to

the mobile station (abstract). Cook teaches the idea that communications between the

server and the mobile station is performed using an internet protocol in column 2 lines

36-46 and column 6 lines 44-46, i.e. IS-707.

Therefore it would have been obvious for one of ordinary skill in the art at the

time of invention to utilize the teachings as in Cook with the teachings as in 3GPP2. The

motivation for doing so would have been to allow for over the air updates utilizing a data

channel in accordance with a CDMA interface. (cook column 3 lines 15-28)

Regarding claims 82, 88, and 94. The combination of 3GPP2 and Cook further

teaches:

receiving, by the server, a capability message from the mobile station, wherein

the capability message is indicative of a messaging technique supported by the mobile

station (3GPP2 page 3-20, Table 3.5-1, Protocol Capability Response Message sent

from the mobile thus received by the server);

receiving, by the server, a first response message from the mobile station,

wherein the first response message comprises a status of a computation of a first value

performed by the mobile station (3GPP2 page 3-20, Table 3.5-1, MS Key Response

Message sent from the mobile to the server);

receiving, by the server, a second response message from the mobile station,

wherein the second response message comprises the first value (3GPP2 page 3-20,

Table 3.5-1, Key Generation Response Message sent from the mobile to the server);

and

receiving, by the server, a first commit response message from the mobile station

(3GPP2 page 3-20, Table 3.5-1, Commit Response message sent from the mobile to

the server), wherein the security-related parameter comprises an authentication key, a

security key or a security key defined by a code-division multiple access standard

(3GPP2 page 4-4, A Key, i.e. authentication key), wherein the internet protocol

comprises an internet protocol-based over-the-air device management protocol (Cook

column 5 lines 47-64), wherein the server comprises an internet protocol-based over-

the-air device management server (Cook figure 1 item 12).

Regarding claims 83, 89, and 95. 3GPP2 further teaches wherein the first value

comprises a MS_RESULT value and the second value comprises a BS_RESULT value

(page 3-24 and 4-9), wherein the at least one first command comprises a first EXEC

command and the at least one second command comprises a second EXEC command.

(pages 4-8 and 4-9)

Regarding claims 84, 90, and 96. 3GPP2 further teaches wherein the first

request message comprises an internet protocol-based over-the-air device

management key request message, wherein the first response message comprises an

internet protocol-based over-the-air device management key response message,

wherein the second request message comprises an internet protocol-based over-the-air

device management key gen request message, wherein the second response message

comprises an interact protocol-based over-the-air device management key gen

response message, wherein the commit message comprises an internet protocol-based

over-the air device management commit message, wherein the commit response

message comprises an internet protocol-based over-the-air device management commit

response message. (3 GPP2 shows the specific types of message in tables 3.5-1 and

4.5-1, and Cook teaches the communications can be internet protocol-based over the

air in column 5 lines 47-64)

Regarding claims 86, 92, and 98. The method of claim 82, further comprising:

in response to the server receiving the first response message from the mobile station,

computing, by the server, the second value (page 4-9); and in response to the server

receiving the second response message from the mobile station, computing, by the

server, the security-related parameter. (page 4-9 and 4-10)

Allowable Subject Matter

5.   Claims 58, 59, 68, 69, 78, 79, 85, 91, and 97 are objected to as being dependent

upon a rejected base claim, but would be allowable if rewritten in independent form

including all of the limitations of the base claim and any intervening claims.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. THIER whose telephone number is (571)272-2832. The examiner can normally be reached on Monday thru Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T THIER/
Examiner, Art Unit 2617
10/6/2010